

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
Amendment of Part 73 of the)	
Commission's Rules to Permit)	Docket No.: MM DOCKET NO. 99-325
The Introduction of Digital Audio)	
Broadcasting in the AM)	
And FM Broadcast Services)	

REPLY COMMENTS of John Pavlica, Jr.

Introduction

I am an American consumer, an electrical engineer, a licensed and active amateur radio operator, a participant with Lucas County Amateur Radio Emergency Services and a loyal radio listener. I respectfully submit this document in reply to comments made by my colleagues and by various broadcasting organizations.

Failure to Comply with NRSC Mask

Comments and Reply Comments submitted by Mr. David Hershberger (06/14/04), by Mr. Charles Hutton (06/14/04) and by Mr. Barry D. McLarnon, PE (07/15/04), provide measurements in engineering units of what general radio listeners have attempted to inform the FCC all along: that the hybrid iBiquity IBOC digital AM radio broadcast does not fit into the existing NRSC radio

mask (CFR 47, Part 15). The hybrid IBOC AM is a full-time violator of the NRSC mask designed to afford reasonable, momentary levels of adjacent channel interference. The AM IBOC interference is unacceptable. The public deserves **independent testing** of adjacent station IBOC AM interference of both: two digital hybrid stations and, one hybrid IBOC station adjacent to an analog station – testing both day and night groundwave and skywave interference. Mr. David Hershberger is a very well respected AM broadcast engineer, with whom I first corresponded with back in 1983, and his AM broadcasting knowledge is without question. It is my opinion that the American public deserves far more engineering **facts** and data (similar to those presented by the above-mentioned engineers) from **any** company proposing changes to our broadcasting bands.

Additional Interference and Remediation

Even the National Association of Broadcasters (NAB) in their Reply Comments (06/15/04) do not deny the existence of “additional interference” on the AM band from IBOC. If the FCC allows this “additional interference” for IBOC, then what new level of, or lack of, interference protection will other stations be given such as public safety radio communications, amateur radio, BPL, wireless LAN, and television broadcasts? How will the FCC render immediate action on IBOC interference? I was very surprised to see Comments from ABC/Disney Radio (06/16/04) in support of IBOC on the AM band when two of their 50,000 watt stations will suffer greatly reduced coverage areas if both 760-WJR and 770-WABC were to both broadcast in hybrid AM IBOC.

IBOC Stereo AM Coverage Area?

In the aforementioned NAB Reply Comments, they “promise” that AM IBOC will allow for the “reintroduction of music formats to the band”. I have several reply comments to that statement.

- 1- Music on the AM band has not died yet, and many stations still broadcast a musical format. The formats of “Music of Your Life”, classic country, big band and oldies all still exist on the U.S. AM band, (plus in Canada and in Mexico) and many of these music format stations still broadcast in C-Quam stereo – stereo that covers their entire analog coverage area.
- 2- Speaking of AM stereo, the iBiquity data does not show any maps of how much STEREO AM coverage one would have with their digital hybrid system. From what I can interpret from their documentation, one could expect the stereo service area to be EVEN LESS than the mono digital coverage area. Mr. Charles Hutton in his Comments (06/14/04) asks the very same question – where is the data about the audio quality and STEREO AM coverage area of an iBiquity station compared to an analog AM stereo signal?
- 3- WSM-650 Nashville covers many states at night with their classic country music format and the live broadcasts of The Grand Ole Opry. I listen to them nightly here in Ohio. When WSM uses their analog AM stereo system, they still cover many states at night. What kind of stereo coverage area can WSM-AM expect if they are broadcasting with the iBiquity hybrid AM system AND WFAN-660 New York City is also broadcasting with the iBiquity hybrid system?

AM Stations Simulcast Digital on UHF Frequencies

A Reply Comment filed by long-time broadcast professional Frederick Vobbe (07/14/04) not only echoes the warning about meeting the NRSC mask, but also suggests a new UHF band for migration by AM stations by using vacant analog television channels. Why hasn't the NAB supported the “best of both worlds”: a UHF band allocation for all-digital broadcasts which would be a simulcast of the analog AM station; thereby, allowing the listener to chose from the greater

coverage area at night from the AM band, or the smaller coverage area and all-digital signal from the UHF station? This plan would also prevent the waste of the estimated 600-800 million analog AM receivers, plus gives listeners a choice without damage to the existing AM band. The UHF band would allow for a much wider bandwidth for digital data than the narrow AM bandwidth.

Analog AM Radio Is an Important American Communications Resource

Mr. Leonard Kahn, a broadcasting visionary, inventor and professional engineer, filed some very emotional Comments and Reply Comments (06/16/04 & 07/12/04). His emotion echoes what many AM band listeners also feel: that “our” analog AM broadcasting band is much too important to merely gloss-over the lacking technical issues of IBOC and allow for “additional interference” and reduced stereo coverage areas. In his Reply Comments, Mr. Kahn is correct in stating that America’s “first line of communications defense (is) AM Radio”. It is my opinion that we must continue to allow for analog AM radio to survive without new and unchecked interference from digital sources such as IBOC and/or BPL.

Summary

I agree with Mr. Frederick Vobbe’s Reply Comments (07/14/04) that digital IBOC on the AM band is a poor attempt at using a technical issue to try to address the content issue. People will go to what content they want regardless of the quality of the medium. To my ears, satellite radio audio, digital audio on MP3’s, minidiscs, or internet radio all suffer from digital audio compression and in my opinion are not nearly as natural-sounding as a decent FM station or local Stereo AM music station. Diverse content draws some of the consumers to these lesser-quality digital mediums. The Top 40 AM stations of the 1960’s and the wide-ranging experimental formats on FM station in the

early 1970's brought more and more listeners to radio than what just technology alone could bring to radio. Content is still "king".

In summary, I suggest the Commission allow any type of additional technology on the AM broadcast band that meets the NRSC mask - CFR 47, Part 15 - 47 CFR Section 73.44 - AND maintains analog audio frequency response from 20Hz to 7500KHz without interference to adjacent analog stations. This AM broadcasting plan would permit on the AM band: analog mono, C-Quam stereo, Kahn ISB stereo, Harris AM stereo, Kahn CAM-D (after technical testing), AM stations with a reduced digital component meeting the mask, or even AM stations transmitting a digital signal that "points" to their new UHF all-digital radio simulcasting frequency.

I implore the FCC to withhold authorization of the current iBiquity IBOC digital broadcasting on the AM broadcast band during both nighttime and daytime hours of operation.

Once again, I thank you for allowing me to voice my opinion, suggestions and comments.

Respectfully submitted,

John Pavlica, Jr.